



US00PP30639P2

(12) **United States Plant Patent**
Stanley

(10) **Patent No.:** **US PP30,639 P2**
(45) **Date of Patent:** **Jul. 2, 2019**

(54) **HEMP PLANT NAMED ‘CW2A’**

CPC A01H 5/12; A01H 5/00; A01H 6/28
See application file for complete search history.

(50) Latin Name: *Cannabis sativa* L.
Varietal Denomination: **CW2A**

(56) **References Cited**

U.S. PATENT DOCUMENTS

PP27,475 P2 * 12/2016 Kubby A01H 5/00
Plt./263.1

(71) Applicant: **CWB Holdings, Inc.**, Denver, CO (US)

(72) Inventor: **Joel Stanley**, Larkspur, CO (US)

(73) Assignee: **CWB Holdings, Inc.**, Denver, CO (US)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) Appl. No.: **15/932,859**

(22) Filed: **May 10, 2018**

(51) **Int. Cl.**
A01H 5/00 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./258**

(58) **Field of Classification Search**
USPC Plt./263.1, 258

OTHER PUBLICATIONS

Ingold. Desperate Journey: CBD in Colorado Story 4 Pushing
Ahead, The Denver Post Dec. 9, 2014, pp. 1-8. (Year: 2014).
Kentucky Department of Agriculture Industrial Hemp Research
Pilot Program Summary of Varieties: Including Varieties of Concern
and Prohibited Varieties, retrieved on Jul. 11, 2018, retrieved from
the Internet at http://www.kyagr.com/marketing/documents/HEMP_LH_Summary-of-Varieties.pdf, pp. 1-4, 2018. (Year: 2018).
Leinow L. & Birnbaum J., foreword by Michael H. Moskowitz,
MD., “CBD: A Patient’s Guide to Medicinal Cannabis,” sponsored
by published by the Society for the Study of Native Arts and
Sciences (dba North Atlantic Books) Chapter 8, (2017), 23 pages.

* cited by examiner

Primary Examiner — June Hwu

(74) Attorney, Agent, or Firm — Cooley LLP

(57) **ABSTRACT**

The present invention provides a new and distinct hemp
cultivar designated as ‘CW2A’.

13 Drawing Sheets

1

Latin name of genus and species: *Cannabis sativa* L.
Variety denomination: ‘CW2A’.

BACKGROUND OF THE INVENTION

Cannabis is a genus of flowering plants that includes at
least three species, *Cannabis sativa*, *Cannabis indica*, and
Cannabis ruderalis as determined by plant phenotypes and
secondary metabolite profiles. In practice however, *Canna-*
bis nomenclature is often used incorrectly or interchange-

ably.
Hemp, also known as industrial hemp, is a type of
Cannabis plant grown specifically for the industrial uses of
its derived products. Hemp by definition has no more than
three-tenths of one percent (i.e., 0.3%) concentration of
tetrahydrocannabinol (THC). THC causes psychoactive
effects when consumed and is typically associated with
marijuana (i.e., *Cannabis* with higher THC contents). Hemp
extracts produced from industrial hemp, such as extracts
produced from ‘CW2A’, have no such psychoactive effects
due to their low THC content. Values of total CBD and total
THC obtained from laboratory testing of dried mature
female flowers may show variance that results from differing
growing environments, sampling methodologies, and testing
techniques.

The present invention relates to a new and distinct hemp
(*Cannabis sativa* L.) cultivar designated as ‘CW2A’. Whole-
plant hemp extracts from ‘CW2A’ contain an assortment of
phytocannabinoids (e.g., CBD), terpenes, flavonoids and

2

other minor but valuable hemp compounds that work syn-
ergistically to heighten effects of products produced from
‘CW2A’. This synergistic effect is sometimes referred to as
the “entourage effect”. ‘CW2A’ extracts can be used to
produce a variety of products, including liquid and capsule
forms for oral administration, topical products, cosmetic
products, infused beverages, sport products and hemp-in-
fused pet treats.

Despite *Cannabis* being consumed since at least the third
millennium BC, complete scientific corroboration for uses
of CBD are still in their infancy. Industry reports suggest
CBD is used for a variety of health and wellness purposes,
including as a sleep aid, coping with daily stress, fighting
anxiety, relieving pain, assisting with cognitive function and
boosting immune health. Significant research is currently
being conducted at a variety of laboratories on the use of
CBD as it relates to epilepsy, Post-Traumatic Stress Disorder
(PTSD), cancer, autism, neuroprotection, anti-inflammatory
effects, anti-tumor effects and anti-psychotic effects.

‘CW2A’ is a selection resulting from controlled-crosses
using hemp germplasm from different regions of the United
States. The primary goal of the breeding program was to
develop a new hemp variety with high cannabidiolic acid
(CBDA) concentrations and low tetrahydrocannabinolic
acid (THCA) concentrations in its mature female flowers. Of
the females tracing back to the original cross, the healthiest
and most vigorous individual that showed no monoecious
tendencies without stress manipulation was chosen to be
‘CW2A’.